

State of Alaska
Department of Fish and Game
Nomination for Waters
Important to Anadromous Fish

1991
Year of Revision

Anadromous Water Catalog Volume R-1
USGS Quad KETCHIKAN B-5
Name of Waterway _____
Anadromous Water Catalog Number of Waterway 101-45-10600

ALASKA DEPT. OF
FISH & GAME

NOV 14 1991

REGION II
HABITAT DIVISION

For Office Use

Change to _____ Atlas
_____ Catalog
X Both

Addition _____

Deletion _____

Correction X

Name addition:

USGS name _____

Local name _____

Nomination # _____

Richard Reed
Regional Supervisor

11/12/91
Date

Ed Wain

2/20/92

FI
Drafted

1/29/92
Date

Species	Date(s) Observed	Spawning	Rearing	Migration

Comments: Provide any clarifying information, including number of fish observed, location of fish survey data, etc.

15 TO 20 FOOT HIGH, STEEP CASCADING BARRIER FALLS (LACKING A PLUNGE POOL BELOW)
EXISTS APPROXIMATELY 1900 FEET UPSTREAM OF ITS MOUTH. EXISTING CATALOG SHOWS
ANADROMOUS PORTION OF STREAM EXTENDING BEYOND THIS BARRIER APPROX. 1980' FURTHER.
REVISE CATALOG AS INDICATED ON ATTACHED COPY OF KETCHIKAN B-5 CATALOG SHEET.

Attach a copy of a map showing location of mouth and upper points of each species, specific stream reaches identified for spawning or rearing, locations of barriers, such as falls. Attach a copy of the fish survey data, if available.

Name of Observer (please print) KEVIN J. HANLEY

Date: 10-17-91 Signature: Kevin J. Hanley

Address: ADFG, Ketchikan

Signature of Area Biologist:

Jack Gustafson

MEMORANDUM

92-273

STATE OF ALASKA DEPARTMENT OF FISH AND GAME

To: Al Peterson
Forest Practices Forester
Department of Natural
Resources
Ketchikan

FROM: Kevin J. Hanley *KJH*
Habitat Biologist
Habitat Division
Ketchikan

DATE: September 18, 1991
FILE NO: SE-92-002; SE-92-003
PHONE: 225-2027
SUBJECT: Forest Practices
Inspection -
Salmonberry II;
Coon Cove O.S.

On September 12 and 13, 1991, you, Eric Muench, and I conducted a detailed examination of several streams within Cape Fox Corporation's Salmonberry II and Coon Cove over-selection tracts for the purpose of determining their waterbody classifications and riparian protection needs prior to the commencement of next season's timber harvest operations. The results of these examinations are as follows:

Salmonberry II

Prior to examining the streams of concern, we observed two riparian areas in which Ralph Wilson has expressed a desire to salvage windthrown timber. These areas were previously harvested by Klukwan Forest Products in 1988 with very few standing green trees retained along the streambanks.

The first of these occurs within the riparian zone of cataloged stream #101-45-10590 (Salmonberry Creek) below that portion of the 1000 Road in the vicinity of the old woodwaste disposal site. I informed Eric that the language of the forthcoming Forest Practices Regulations provides for the removal of only those portions of downed trees that lie greater than 25 feet from the stream bank (11 AAC 97.230.05) and that all portions within 25 feet should be left in place as they are vital in maintaining long-term stream bank stability and channel morphology. While it is true that this regulation has not been signed into law and therefore is not a statutory requirement (as of yet), its intent is especially applicable in this situation given the fact that very few standing green trees were retained along the stream banks during the initial harvest. Over time, as the decaying rootmasses of those stumps within 25 feet of the stream loose their soil binding capabilities, the long-term contributions of downed trees towards maintaining channel morphology through armoring and stabilizing the banks become increasingly important, especially in floodplain locations. Throughout its observed length, Salmonberry Creek alternates between reaches with relatively steep adjacent sideslopes and those with nearly

level floodplains. Eric will inform Mr. Wilson that within the floodplain locations, he can remove only those portions of downed trees that lie greater than 25 feet from the stream bank and that within those areas of steep sideslopes, he can remove all portions of downed trees above the stream bank but must not disturb any portions on the bank or in the stream.

The second area requested for the salvage of windthrow occurs within the riparian zone of cataloged stream #101-45-10600 below the 2100 Road. Mr. Wilson would like to remove several windthrown spruce (and hemlock?) which bridge the stream. Portions of a few trees occur within the channel itself, however we were not sure whether these were included in the request as well. Given his available equipment, Mr. Wilson does not have the means to remove the trees without impacting the banks and the stream bed as they would have to be dragged across the stream. It is our opinion, however, that even if such means were available, the trees should be left in place to preserve their long-term habitat contributions within this reach of stream where large woody debris is few and far between. Eric agreed that the potential for significant impact was too high to consider allowing their removal and will inform Mr. Wilson that he should not consider these trees for salvage.

101-45-10600
Approximately 300 to 400 feet upstream of this proposed salvage area, a 15 to 20 foot high, steep cascading barrier falls exists which lacks a plunge pool below. Although the catalog of anadromous waters identifies the cataloged portion of stream #101-45-10600 as extending significantly beyond this falls, its existence forms a definitive barrier to the upstream migration of anadromous fish. Beyond the falls, the stream is a type C waterbody which appears to provide exceptional habitat for resident fish. The unit boundaries depicted on the conceptual map appear to have been designed to avoid cross-stream yarding and impact to this type C resident fish stream. We would like to encourage Cape Fox Corporation to retain any and all low-value and non-merchantable timber along the banks of this stream and other similar streams within the Salmonberry II and Coon Cove tracts which provide resident fish habitat. As helicopter logging rather than conventional yarding is proposed within the riparian zone of this stream, selective harvesting and directional felling are highly feasible and would result in the least amount of potential impact to the resident fishery.

101-45-10610
We accessed the next stream, catalog #101-45-10610, via the 2120 Road (road numbers will undoubtedly be changed as new construction begins in the Salmonberry II overselection area). Although this stream is cataloged for pink salmon only, one baited minnow trap was set immediately upstream of the southern boundary of the Salmonberry II tract (the township line separating T74S from T75S) to check for the presence of rearing coho salmon. After a 25 minute soak, the trap

yielded 1 coho salmon fry and 12 cutthroat trout. As the channel morphology is predominantly incised and contained by bedrock, and average gradient is approximately 6 percent, this reach of the stream is a type B waterbody. It extends upstream of the overselection boundary for 50 to 75 feet to where the gradient increases to much greater than 8 percent, channel substrate is bedrock, and type C waterbody characteristics predominate. This high velocity reach of type C extends upstream for approximately 100 to 125 feet to the base of a 15 to 20 foot high, 60 to 75 foot long, steep gradient barrier falls which lacks a plunge pool. Although anadromous fish could navigate the 100 to 125 foot long high velocity reach of type C below the falls, spawning and rearing habitat is absent as the channel is incised, contained by geomorphology, and has a substrate of bedrock. The falls, then, forms the true definitive end of upstream fish migration. Extremely steep sideslopes occur on both sides of the stream below the falls, especially on the west side adjacent to the conceptual Unit 5 boundary. It is our understanding that no timber harvesting is planned on the east side of the stream. The eastern boundary of Unit 5, as depicted on the conceptual map, appears to occur atop the slope break on the west side of the stream. We would encourage Cape Fox Corporation to locate the boundary as such during actual unit layout to ensure slope stability above and adjacent to the stream.

Following our examination of stream #101-45-10610, we drove to the terminus of the 2100 Road to access and examine a tributary to the non-cataloged reaches of Salmonberry Creek (stream #101-45-10590). No suitable anadromous spawning habitat was observed within this 8 to 12 foot wide low gradient tributary stream. The stream does, however, exhibit exceptional rearing habitat qualities. Approximately 200 feet upstream of our access point, the stream flows through a series of successive beaver ponds. The 5 to 6 foot high dam at the outlet of the first pond appears to be an effective barrier to upstream fish passage. A total of four baited minnow traps were set at various locations to check for the presence of rearing coho salmon, however none were captured. Two traps, located within the free flowing reach downstream of the first beaver dam, yielded a total of 17 cutthroat trout and five Dolly Varden char. The two other traps, located in the first and second beaver ponds, respectively, yielded a total of 14 cutthroat trout. Eric indicated that a constricted high velocity short chute exists in the vicinity of the 2000 Road crossing downstream of our initial stream access point. This probable barrier to coho fry may account for the reason that none were trapped. Given the existence of this barrier, the lack of evidence of anadromous fish, and the fact that the tributary's confluence with Salmonberry Creek occurs well above the end of anadromous cataloging, the stream is best classified as a type C waterbody.

Coon Cove O.S.

The upper, uncataloged reaches of stream #101-45-10420 occur within the northern portion of the Coon Cove overselection tract, approximately 2.5 miles upstream of the end of anadromous cataloging. The lower cataloged portion extends approximately 1/2 mile upstream of its outlet at the upper George Inlet Salt Chuck. The purpose for examining the stream was to verify the presence of a barrier to upstream fish migration, the location of which was assumed to coincide with the end of cataloging as depicted on the stream catalog map.

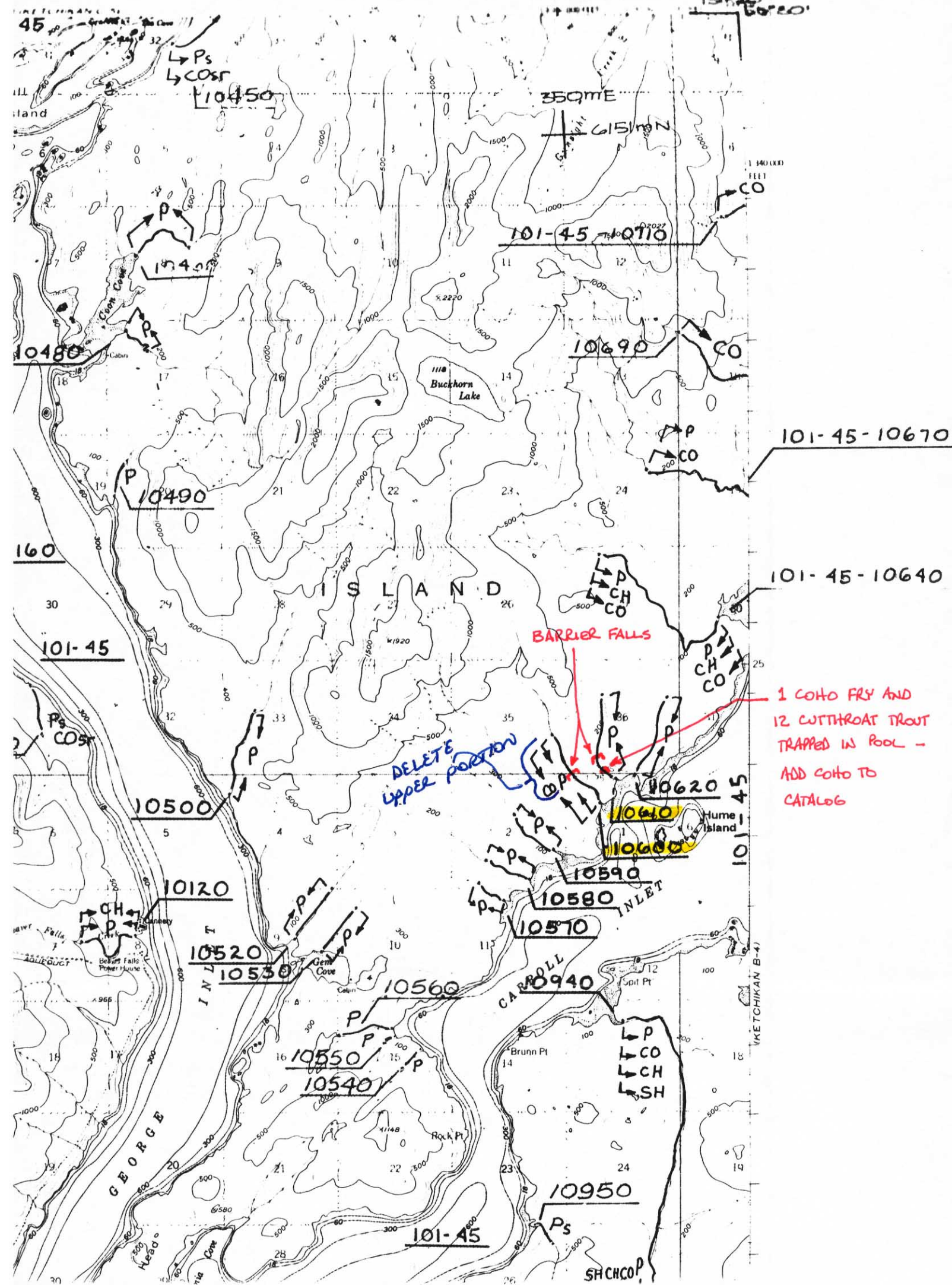
Before landing, we flew over the entire length of the stream from its mouth at the Salt Chuck to its upper reaches within the Coon Cove overselection tract. From the air, the barrier to fish passage (and the end of anadromous cataloging) was readily located. We landed in the Salt Chuck and walked upstream to examine this barrier and determine if, in fact, it constituted a significant impediment to upstream fish migration. The stream had a relatively high density of pink salmon spawners throughout its cataloged reach at the time of our visit. The end of cataloging is accurately depicted on the stream catalog map and consists of two successive barrier falls. The first is an approximate 10 foot high, 20 foot long high gradient, high velocity chute. Numerous pinks were attempting to traverse this chute but none will succeed given the extreme high velocity of flow. The second falls occurs just upstream of the first. It is a typical near vertical falls of approximately 6 to 8 feet in height (in the vertical section), below which is a 10 to 15 foot high, 15 to 20 foot long steep gradient, high velocity cascade. A spillway-like offshoot channel forms a high velocity chute to the right of the main falls. Although this stream is cataloged for pink and chum salmon only, there is the possibility that extremely aggressive coho salmon could successfully navigate and traverse this chute given the presence of the large plunge pool below. This is highly unlikely, however, as they would first have to get by the lower high gradient, high velocity chute. Nonetheless, two baited minnow traps were set approximately 200 to 300 yards upstream of the second falls to check for the potential presence of rearing coho juveniles. Together, the traps yielded a total of 33 cutthroat trout and 15 Dolly Varden char. Although no anadromous fish were captured, the large number of resident cutthroat trout and Dolly Varden char that were indicates the high productivity of this type C resident fish stream. For its entire remaining length upstream of the barrier falls, the stream is low gradient (less than 8 percent) and ranges in width from approximately 10 to 20 feet in the upper reaches (estimated from aerial observations) to 30 to 60 feet in the lower reaches above the falls (estimated on-site). Again, as with

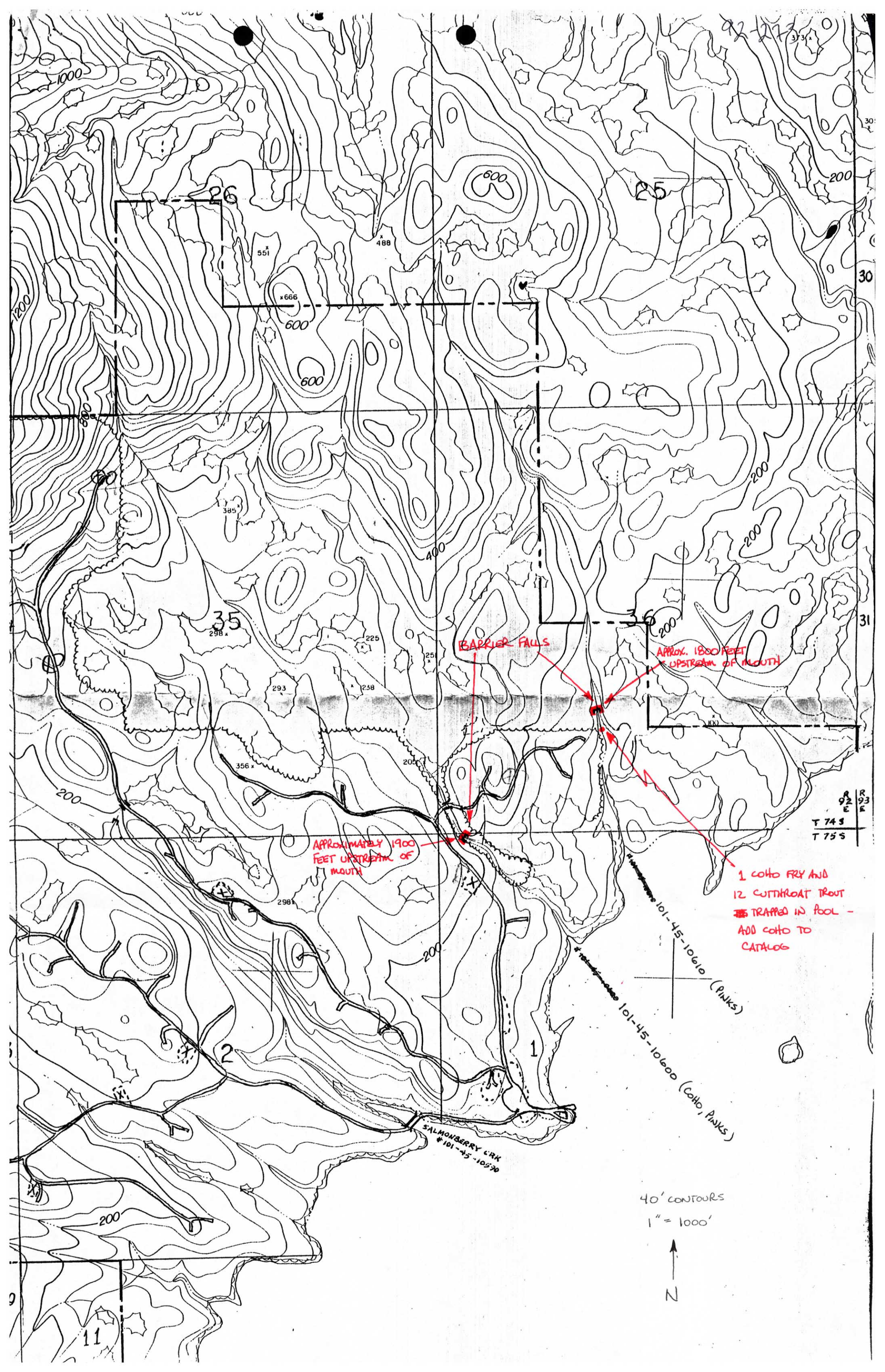
those resident portions of the streams within the Salmonberry II tract, we would encourage Cape Fox Corporation to afford this type C stream an adequate amount of protection to sustain its resident fish populations.

If you have any need to discuss this report, please contact me at 225-2027.

cc: R. Reed, ADF&G, Juneau
J. Gustafson, ADF&G, Ketchikan
M. Keith, ADEC, Ketchikan
C. Kent, ADEC, Juneau
E. Muench, Alaska Woods Service, Ketchikan
D. Campbell, Cape Fox Corporation, Ketchikan

KETCHIKAN B-5





BARRIER FALLS

APPROX. 1800 FEET
UPSTREAM OF MOUTH

APPROXIMATELY 1900
FEET UPSTREAM OF
MOUTH

1 COHO FRY AND
12 CUTTHROAT TROUT
TRAPPED IN POOL -
ADD COHO TO
CATALOG

101-45-10610 (PINKS)

101-45-10600 (COHO, PINKS)

SALMONBERRY CRK
#101-45-10570

40' CONTOURS
1" = 1000'

